



University of Hawaii at Manoa

Environmental Center
A Unit of Water Resources Research Center
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RP:0152

August 12, 1993

Ms. Rae M. Loui, Deputy Director
Department of Land and Natural Resources
Commission on Water Resource Management
P. O. Box 621
Honolulu, Hawaii 96809

Dear Ms. Loui:

Application for a Stream Channel Alteration
and Diversion Works Permit
Petition to Amend Interim Instream Flow Standard
Kahakuloa Stream, Wailuku, Maui

The proposed action involves the reconstruction of an existing stream diversion structure on Kahakuloa Stream. In addition to the diversion structure, the proposed action includes the placement of rocks and boulders along an eroding stream bank. An access roadway which serves the diversion structure site, as well as a number of individual taro farm is located along the stream bank, and further erosion to this bank will undermine the road.

Our review of this document was prepared inhouse with the assistance of Jacquelin Miller and Huilin Dong.

Ecological characteristic of this stream were evaluated in the Environmental Center report, "Ecologically Sensitive Wetlands on Maui: Groundwater Protection Strategy for Hawaii". Attached is a copy of Habitat Description of Kahakuloa Stream taken from that report.

The proposed project affects an environmentally sensitive area which was assigned a sensitivity rating of Aa12tm. According to EPA-GPS guidelines, this sensitivity rating represents a system that is ecologically vital. The sensitive ecological system rating reflects the "uniqueness" or "non-renewable" attributes of the particular system. The ratings provide the basis, along with certain geohydrological information, for determining if a particular groundwater should be considered ecologically vital. Based on our review of the preliminary

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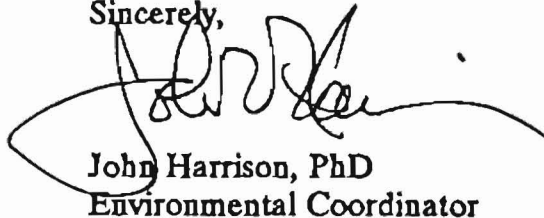
environmental assessment, we think the impacts of this project and the mitigation measures need to be further examined.

In addition, the DEA fails to acknowledge the Outstanding Rating of the stream with regard to Cultural resources (Hawaii Stream Assessment).

Since the stream is acknowledged as Outstanding (HSA) with regard to Aquatic resources, we concur that "adequate mitigation measure must be taken to protect stream fauna" (page 20). However, simply to state that "construction will be timed to coincide with low stream flow in order to minimize downstream transport of sediment" (page 20) is inadequate. Because Hawaii stream systems are notoriously flashy, there remains a high probability of flood flow due to storm events at almost any time of year. We suggest that additional mitigative strategies, perhaps even providing for bypass of the construction area during high flow events, be incorporated.

Thank you for allowing us to review and comment on the subject project. Should you have any questions, please contact me at 956-3968.

Sincerely,



John Harrison, PhD
Environmental Coordinator

Attachment(s)

cc: OEQC
Roger Fujioka
Jacquelin Miller
Huilin Dong